

CLAIMS

1. A stent graft for implantation in a body lumen comprising
a tubular graft having a first stent section comprising reinforcing material formed into
5 a first pattern and a second stent section comprising reinforcing material formed into a second
pattern, the first pattern being different to the second pattern,
the tubular graft having a first diameter in the region of the first stent section and a
second diameter in the region of the first stent section,
wherein the first diameter is different to the second diameter.
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2. A stent graft as claimed in claim 1 wherein the difference between the first diameter to
the second diameter is up to 5mm.
3. A stent graft as claimed in claim 1 wherein the difference between the first diameter to
15 the second diameter is about 2mm.
4. A stent graft as claimed in any preceding claim wherein the first diameter is larger than
the second diameter.
- 20 5. A stent graft as claimed in any of claims 1 to 3 wherein the second diameter is larger
than the first diameter.
6. A stent graft as claimed any preceding claim wherein the first stent section comprises a
plurality of circumferential hoops of reinforcing material disposed around the tubular graft.
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7. A stent graft as claimed in any preceding claim wherein the second stent section
comprises at least one circumferential hoop of reinforcing material which oscillates about a
line running circumferentially around the longitudinal axis of the tubular graft.

8. A stent graft as claimed in claim 7, wherein the ratio of the mean distance from the peak to the trough of said oscillation measured parallel to the longitudinal axis of the graft diameter of the graft to the diameter of the graft in the region of the second stent section is about 1:2.

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9. A stent graft as claimed in claim 7 or 8 wherein the second stent section has $2 + 4n$ peaks wherein n is an integer ranging from 1 to 3.

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10. A stent graft as claimed in any preceding claim, wherein the first and second stent sections are separated by a spacer section, the axial length of which is from a sixth to a third of the diameter of the graft in the region of the first stent section.

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11. A method comprising radially compressing a stent graft as claimed in any preceding claim and inserting the compressed stent graft into a catheter having an internal diameter which is less than the diameter of the first stent section of the stent graft.

12. A method as claimed in claim 11 wherein said internal diameter is less than about a quarter of the diameter of the first stent section of the stent graft.